REMARKS/ARGUMENTS

The amendments to Claim 1 are supported by the claim itself, Claims 4 and 6, and by specification page 5, lines 16-29. New Claims 13 and 14 are supported by Claim 1 and at specification page 5, lines 16-29. New Claim 15 is supported at specification page 6, lines 27-31. New Claim 16 is supported at specification page 5, lines 6-8. New Claim 17 is supported by Claims 2, 3, 5, 9 and 10. Finally, New Claim 18 is supported by Claim 6. No new matter has been entered.

Applicants appreciate the return of the initialed 1449 (IDS) filed August 2, 2006.

By the above amendment Applicant has narrowed the scope of the present claims to a preferred embodiment where the preservative is selected from the group consisting of benzoic acid, parahydroxybenzoic acid, their salts, and mixtures thereof. As explained in the present specification, this combination of peroxygen compound and specified preservative leads to numerous benefits including both an animal preference for feed treated with this combination and improved milk yield from cattle eating feed that has been treated according to the present invention process. The presently claimed process also reduces the amount of fermentation occurring in the plant material and therefore provides a higher nutritional value, for example higher sugar content, to the animal. See specification page 2, lines 27-31.

The rejection of claims 1-4, 8 and 10-12 over Heikonen in view of Hei is no longer applicable, as the claims now require the combined use of a peroxygen comound and of a preservative selected from the group consisting of benzoic acid, parahydroxybenzoic acid, their salts, and mixtures thereof. Heikonen discloses the combined use of hydrogen peroxide and of a preservative which is formic acid for the preservation of fodder. Hei discloses antimicrobial compositions comprising at least two solvents and an optional antimicrobial agent such as carboxylic acids, carboxylic esters, sulfonic acids, iodo compounds or active halogen compounds, active oxygen compounds and quaternary ammonium compounds

(paragraphs [0112] and [0114] of Hei) . Thus, the references do not suggest the combined use of a peroxygen compound with benzoic acid, parahydroxybenzoic acid, their salts or their mixtures, as claimed and the rejection should be withdrawn. Rossmoore, applied against Claims 5 and 7 in combination with Heikonen and Hei as disclosing a combination of peracetic acid, hydrogen peroxide and acetic acid fails to make up for that lacking in Heikonen and Hei , and thus this rejection should similarly be withdrawn.

With regard to the rejection of Claim 6, Doyle and Sembo are added to Heikonen, Hei and Rossmoore, all discussed above. That is, five separate disclosures are applied against Claim 6, which further limits the process of Claim 1 by requiring that the liquid composition comprise from 5 to 60 % wt of hydrogen peroxide and from 5 to 25 % wt of sodium benzoate.

First, and as discussed above, none of Heikonen, Hei or Rossmoore discloses or suggests the combined use of hydrogen peroxide and of sodium benzoate. Doyle relates to a method and compositions for treating uncooked human food items, such as produce, to reduce viable bacteria on the surfaces thereof. Doyle's active agents are a combination of lactic acid and either hydrogen peroxide, sodium benzoate, or glycerol monolaurate. See page 3, lines 16-18 of the reference. Doyle thus clearly does not disclose or suggest a method for treating an harvested plant material that is an animal feed selected from harvested grass, cereals, maize, wheat, and/or legumes as presently claimed, nor is a combination of a peroxygen compound and at least one preservative as specified herein disclosed or suggested. Second, Applicants' finding that their presently claimed method provides an animal preference for feed treated according to the invention process and an improved milk yield is nowhere suggested by Doyle.

Sembo relates to a method for controlling ecto parasites of animals wherein 1-(2,6-difluorobenzoyl)-3-[2-fluoro-4-(1,1,2,3,3,3-hexafluoropropoxy)phenyl]urea, which Sembo

calls "Compound #1" is applied to the animals, especially by oral application. Paragraph 14 of Sembo, relied upon in the Official Action, reads (emphasis in bold added):

> [0014] In oral application, examples of the form of the composition includes tablets, liquids, capsules, wafers, biscuits, emulsifiable concentrates, and/or so on. The oral application includes a method to apply the composition and a method to apply the mixture of Compound #1 or the composition with feed for the host animals. **To prevent hydrolysis or degradation by constituents of animal feed, Compound #1 may** previously be formulated in a protective matrix such as gelatin, and **be further protected by formulation with preservatives and anti-oxidents such as sodium benzoate**, parabens, BHT (butylated hydroxytoluene), and BHA (butylated hydroxyanisole).

Here, Sembo is clearly preserving Compound #1 from interacting with the components of the animal feed, and is not disinfecting or preserving animal feed. In addtion, the reference does not suggest the combination treatment as presently claimed using at least one peroxygen compound and at least one preservative selected from the group consisting of benzoic acid, parahydroxybenzoic acid, their salts, and mixtures thereof.

The closest prior art herein is Heikonen, which uses formic acid alone or in mixture with hydrogen peroxide in preserving animal feed. Applicants have already shown, in the present specification, that the presently claimed preservative selected from the group consisting of benzoic acid, parahydroxybenzoic acid, their salts and their mixtures provide superior results as compared to formic acid, which results are unexpected in view of the disclosure in Heikonen. Specifically, in Example 4 herein described at specification page 9 several embodiments of the present invention as prepared in Examples 1 and 2 were evaluated for their aerobic stability and compared with formic acid. As shown in Table 4 at the top of specification page 10:

TABLE 4

Forage Treatment	Temperature (° C.) Day 0	Temperature (° C.) Day 6	Temperature increase (° C.)
Untreated Control	18.6	19.5	+0.9
Hydrogen Peroxide/ Sodium Benzoate formulation as Example 1	18.0	18.0	0.0
Peracetic Acid formulation as Example 2	18.2	18.7	+0.5
Formic Acid	17.8	20.5	+2.7

formic acid showed a substantial and significant increase in temperature due to aerobic micro-organism activity, indicative of aerobic instability, as compared with embodiments of the present invention as prepared in Examples 1 and 2, and even as compared with untreated control. This improved aerobic stability for the present invention method, and the destabilizing effect of formic acid even as compared with untreated control is nowhere disclosed or suggested by Heikonen.

In addition, in Example 5 herein at specification pages 10-11 the benefits of Applicants' combination treatment, as opposed to both Heikonen's and Sembo's single component disclosures (Heikonen discloses using formic acid alone and Sembo discloses using sodium benzoate alone, albeit for an entirely different purpose) are demonstrated where Treatment 1 used 19.5% w/w hydrogen peroxide and 15% w/w sodium benzoate, Treatment 2 used 30% w/w hydrogen peroxide and 22.5% w/w sodium benzoate, Treatment 3 used 15% w/w sodium benzoate alone, and Treatment 4 used 19.5% hydrogen peroxide alone:

TABLE 5

Analysis of stored grass after 12 weeks	Treatments 1	2	3	4	Control
1. Dry Matter (% w/w)	44.8	46.3	44.9	48	43.3
2. Crude protein (%)*	12	13	13.6	11.5	12.9
3. Ash (%)*	8.5	8.3	8.2	8.2	9.6
4. pH	4.3	4.5	4.3	4.2	4.5
5. Ammonium - Nitrogen (%)*	1.8	3.1	3	3	4
6. Sugars (%)*	8.6	10.2	7.3	8.9	5.1
7. Temperature of forage in clamp (° C.)	19.5	16.3	26	24.3	26

*percentages are on a dry matter basis

As shown above, analysis of sugar content (6) show that treatments with compositions containing both hydrogen peroxide and sodium benzoate (Treatments 1 & 2) show reduced fermentation of the grass compared to the control or to the compositions containing benzoate only (Treatment 3) with higher levels of unfermented residual sugars. The benefit of the combination treatments (Treatments 1 & 2) on fermentative activity is also clearly illustrated by the temperature (7) measured in the centre of the clamps during sampling. Treatments 1 and 2 show a lower temperature compared to the control or to either of the additives applied alone (Treatments 3 & 4).

Accordingly, and in view of the above, the rejection over Heikonen, Hei, Rossmoore, Doyle and Sembo should be withdrawn.

For these reasons, Applicants respectfully request the reconsideration and withdrawal of all outstanding rejections herein, and the passage of this case to Issue.

Respectfully submitted,

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